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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,602	06/30/2001	Jurgen A. Heinz	19368-086997	5734

28886 7590 08/20/2002

CLARK HILL, P.C.
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DETROIT, MI 48226

EXAMINER

NGUYEN, THONG Q

ART UNIT PAPER NUMBER

2872

DATE MAILED: 08/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/869,602

Applicant(s)

HEINZ, JURGEN A.

Examiner

Thong Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6. 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. The present Office action is made in response to the Pre-Amendment (Paper No. 3) filed by applicant on 06/30/2001.
2. It is noted that in the mentioned Pre-Amendment, applicant has canceled claims 1-22 and added claims 23-44 into the present application.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement filed on 01/17/2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

In particular, a copy of each of the DE reference Nos. 19738609 A1; 4410752 C2; 4405496 A1; and 2745666 A1 and a copy of the AT reference No. 2468 listed in the form PTO-1449 has not been received by the Office.

Oath/Declaration

5. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

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The oath or declaration is defective because:

a) Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c); and

b) It was not executed in accordance with either 37 CFR 1.66 or 1.68.

6. Receipt is acknowledged of papers filed under Rule 371 based on a PCT application filed in Europe on 04/19/2000. Applicant has not complied with the requirements of 37 CFR 1.63(c), since the oath, declaration or application data sheet does not acknowledge the filing of any foreign application. A new oath, declaration or application data sheet is required in the body of which the present application should be identified by application number and filing date.

Drawings

7. The drawing contain three sheets of figures 1-4b filed on 6/30/2001 have been received by the Office.

8. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature concerning the vehicle power supply as recited in claim 23 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: In

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particular, the numerical references "21" and "22" as shown in figure 3 are not mentioned in the specification. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

10. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

11. The disclosure is objected to because of the following informalities: a) Page 1: lines 14-17, the description thereof "The dc voltage is...on the amount of glare" is unclear due to grammatical errors; b) Page 5: lines 18-19, the description thereof "Fig. 2 shows...unit 5" is unclear. It is unclear why applicant needs the terms "or an exterior mirror unit 5" after the phrase "Fig. 2 shows... according to the invention" c) Page 6: line 18, what does "SMD" mean? There are still some grammatical and idiomatic errors in the specification. Applicant should carefully proofread the specification. Appropriate correction is required.

12. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification fails to provide a proper antecedent basis

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for the feature concerning the electrical connections in the form of foil printed circuits as recited in claim 44.

Claim Rejections - 35 USC § 112

13. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

14. Claims 24-44 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

a) Claim 24 is rejected under 35 USC 112, first paragraph because the specification fails to provide sufficient information/details to enable one skilled in the art to make the device without undue experimentation. In particular, the specification discloses a control device having a sheet-like heating resistor, a circuit having at least one resistor and one transistor, see specification pages 7 and 9 and figs. 4, for example; however, the specification fails to provide sufficient data for the resistor(s) and the transistor(s) so that the voltage outputted from the circuit is less than 25% of the vehicle voltage. In other words, what kind of resistor and what is the value of the resistor, etc... being used so that the control voltage is less than 25 % of the vehicle voltage.

b) Claim 33 is rejected under 35 USC 112, first paragraph because the specification does not teach the connection between the resistor and the mirror is

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made by the so-called "the heating resistor (3) is connected to the electrochromic mirror (2) either as part of the material of same" (lines 1-2). Applicant should review the specification, in particular, in pages 5-6, in which the resistor is connected to the rear side of the mirror via a coating or a glass heating structure of a foil. However, all of the method of connection as described in the specification does not teach that the material of the resistor, the material of the carrier and the material of the mirror are the same.

c) The remaining claims are dependent upon the rejected base claim and thus inherit the deficiencies thereof.

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 23-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claim 23 is rejected under 35 USC 112, second paragraph for the following reasons: First, it is unclear what device does applicant intend to claim here. The claim is generally narrative and indefinite, failing to conform with current U.S. practice. In particular, the claim recites a vehicle rear vision system having a rearview mirror unit provided with an electrochromic mirror, a control device and a vehicle power supply device. While the claim provides that the control device has a sheet-type heating resistor for carrying away the heat occurred through electrical dissipation; however, since the claim does not have any term such as

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comprising or including and all of the components and their structural relationships are defined in one sentence which is similar to the preamble of a claim; therefore, it is unclear which feature of the device applicant intends to claim. Second, the feature "the reflection properties" (line 4) lacks a proper antecedent basis. Furthermore, what does applicant mean by "properties" of a reflection?

b) Claim 26/25 is indefinite. The claim recites the feature thereof "at least one of said interior and exterior mirror unit" (lines 1-2); however, the base claim 25 recites that there is only one kind of mirror unit being existence in the system. See the claim language thereof "the rearview mirror unit is embodied as an interior mirror unit or an exterior mirror unit" (claim 25, lines 1-2). As a result, either the interior mirror unit or the exterior mirror unit recited in claim 26, lines 1-2 lacks a proper antecedent basis.

c) Claim 32 is unclear due to the grammatical error. In other words, the phrase thereof "there is disposed a mirror glass heating system (6) is disposed belonging to the rearview mirror unit" (lines 2-3).

d) Claim 34 is indefinite because the feature thereof "further elements of the control device" (lines 3-4) is indefinite. In other words, what kind of "further elements" of the control device does applicant imply here?

e) Claim 38 is rejected under 35 USC 112, second paragraph because the feature "the region of incident light" (line 2) lacks a proper antecedent basis; and the phrase "preferably" (line 2) renders the claim indefinite because it is unclear

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whether the limitation(s) following the phrase are part of the claimed invention.

See MPEP § 2173.05(d).

f) Claim 39 is indefinite because each of the features "the pulse-width modulation" (lines 1-2) and "the pulse-width modulated signal" (line 3) lacks a proper antecedent basis.

g) Claim 41 is indefinite because each of the terms "UART" and "CAN" is indefinite. Further, the claim is indefinite because it is entirely unclear about the structure as well as the operation of the electrical transformation between the data bus and the so-called "UART" or "CAN" system which applicant implied here?

h) The remaining claims are dependent upon the rejected base claim and thus inherit the deficiencies thereof.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claim 22, as best as understood, is rejected under 35 U.S.C. 102(b) as being anticipated by O'Farrell (U.S. Patent No. 5,151,824).

O'Farrell discloses a vehicle rear vision system comprises at least one exterior mirror made by electro-optic/electrochromic material. The mirror comprises a heating system and the operation of the mirror and the heating system is made

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via the power supplied from the power supply of the vehicle via control circuits. It is noted that the heating system comprises a thin sheet of aluminum foil. See O'Farrell, columns 4-5 and 11 and figs. 4A and 14.

19. Claim 22, as best as understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Lynam et al (U.S. Patent No. 5,808,777, submitted by applicant).

Lynam et al disclose a vehicle rear vision system comprises at least one exterior mirror made by electro-optic/electrochromic material. The mirror comprises a heating system and the operation of the mirror and the heating system is made via the power supplied from the power supply of the vehicle via control circuits. It is noted that the heating system comprises a thin sheet of aluminum foil. See Lynam et al, columns 3-4, and 6-7 and figs. 2-8.

Conclusion

20. The U.S. Patent No. 5,808,777 and the EP reference Nos. 820901 A1 and 820901 A3 made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references are cited as of interest in that 1) each of the U.S. Patent Nos. 4,882,466 and 3,686,473 discloses a heating element located on the rear side of a reflector wherein the heating element has a sheet-type configuration; 2) the U.S. Patent No. 4,634,835 is cited as of interest in that it discloses a heating system having a resistor inside a glass plate; and 3) each of the U.S. Patent Nos. 5,990,449 and 6,262,831 discloses a mirror system having a heating device wherein the voltage used in the heating device is controlled to a desired value. It is noted that the U.S. Patent No. 6,262,831 discloses a mirror system having a control circuit for control the

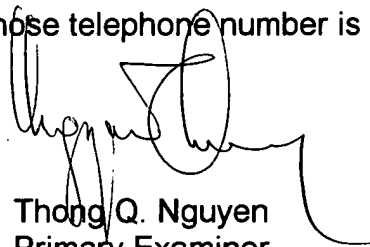
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operation of electrochromic mirror wherein the power used to operate is less than 25 % of the vehicle voltage. However, that Patent has an effective filing date of 10/22/1999 which is later than that of the pending application.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (703) 308-4814. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.



Thong Q. Nguyen
Primary Examiner
Art Unit 2872

August 12, 2002